#### **NED Release Notes**

August 2001

The August, 2001 release of the National Elevation Dataset (NED) represents the eighth update since the NED bi-monthly maintenance schedule began in June, 2000. This release includes existing source data and all new 7.5-minute digital elevation models (DEMs) available in the USGS Sales Database (SDB) as of August 1, 2001. Areas where the new source data were incorporated for this release (and previous releases) are indicated in Figure 1.

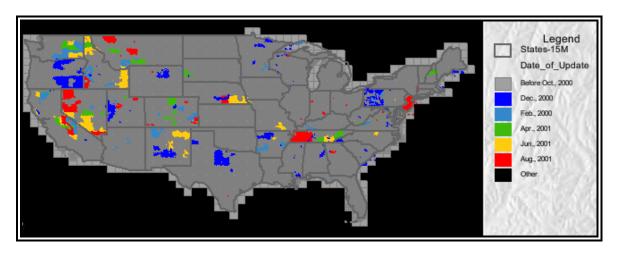


Figure 1. NED update areas, by release date.

### **NED Tile Processing**

NED is processed and stored internally as 1°x1° tiles. The current total of 1,392 tiles includes 5 new tiles added since the June, 2001 release. The number of tiles and changes for each release are listed in Table 1.

Release date	Number of tiles	Note				
June 2000	1,367	CONUS: 925 tiles; AK: 428 tiles; HI: 14 tiles				
August 2000	1,367					
October 2000	1,367					
December 2000	1,367					
February 2001	1,367					
April 2001	1,375	8 tiles added: Puerto Rico and Virgin Islands				
June 2001	1,387	12 tiles added: Pacific islands				
August 2001	1,392	5 tiles added: Pacific islands				

Table 1. Number of NED tiles and changes, by release date.

For the current release, 163 tiles were updated, which represents 17% of NED (not including Alaska tiles). The number of NED tiles processed for each of the last eight releases is shown in Figure 2.

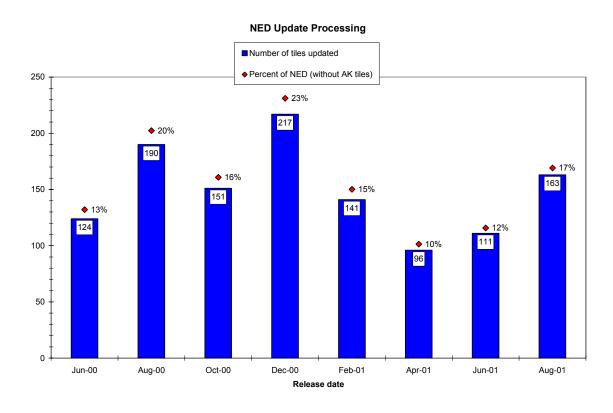


Figure 2. Number (and percentage) of NED tiles processed, by release date.

#### **NED Source Data**

NED source data are selected from the available USGS DEMs according to the following ranking (highest priority listed first): 10-meter, 30-meter Level 2, 30-meter Level 1, 2-arc-second, 3-arc-second. The composition of the source data used in NED continued the trend seen in previous releases with 10-meter increasing and the corresponding decrease in 30-meter. Thus, the ongoing production of USGS 10-meter DEMs is reflected in each NED release. The number of source DEMs (by type) and the percentage of NED derived from each type for each of the last eight releases are shown in Figure 3 and Figure 4, respectively. Note that only 7.5-minute DEMs were included for Figures 3 and 4, so the totals and percentages do not include Alaska which is derived from 2-arc-second source data.

## NED Source Data (7.5-minute DEMs) ■10-meter ■30-meter Level 2 40,000 □30-meter Level 1 35,000 30,000-25,000 20,000 15,000-10,000 5,000 Jun-00 Aug-00 Oct-00 Dec-00 Feb-01 Apr-01 Jun-01 Aug-01 Release date

Figure 3. NED source data (by DEM type) for recent releases.

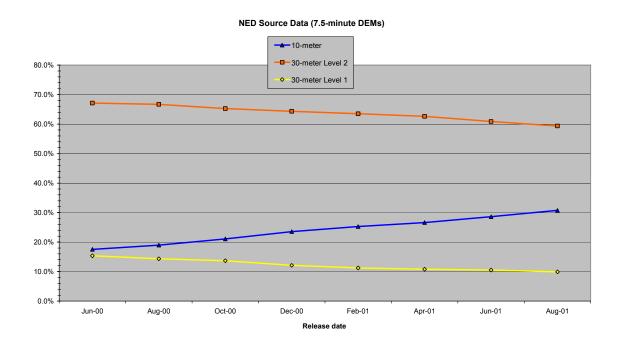


Figure 4. Percent of NED source data (by DEM type) for recent releases.

The changes in NED source data since the previous release are described in Table 2.

Release date	10-meter added	10-meter removed	30-meter Level 2 added	30-meter Level 2 removed	30-meter Level 1 added	30-meter Level 1 removed	Total added	Total removed	Net added
June 2001	1,288	176	31	919	0	134	1,319	1,229	90
August 2001	1,181	6	96	871	49	375	1,326	1,252	74

Table 2. Changes in NED source data (7.5-minute DEMs).

As recorded in the NED spatially referenced metadata, the composition of the NED source data may be described in terms of specific characteristics of the source 7.5-minute DEMs. Table 3 and Table 4 show the number of DEMs by production method and production site, respectively, for the current release. Table 5 lists the NED source data (by 7.5-minute DEM type) for each state.

Release date	GPM	MP	CTOG	DCASS	LT4X	Unknown
August 2001	2,332	3,061	6,759	230	44,845	476

Table 3. NED source DEMs, by production method.

Release date	MAC	мсмс	RMMC	WMC	Contractor	FS	BLM	EMC	Unknown
August 2001	1,748	9,476	8,109	2,706	22,046	9,450	379	258	3,531

Table 4. NED source DEMs, by production site.

# **NED Processing Notes**

The following items were encountered during the August, 2001 NED maintenance:

- In response to a customer question, it was discovered that the header information of 16 source DEMs covering the Hawaiian islands of Molokai and Kahoolawe incorrectly indicate vertical units of feet, while the data are actually in meters. These DEMs were repaired, and the corrected data is reflected in NED. Several Hawaii DEMs with spurious edge values were also repaired.
- A minor versioning conflict was discovered in the SDB. For a few hundred quads dating from early-1999, the newer DEM had a lower version number than the older DEM. This appears to be genuinely anomalous, and is not a serious, nor ongoing problem. One of the indexing programs has been modified to ignore version numbers in favor of product ID numbers which are unique and logically increment, and this appears to have solved the problem.

State	10-meter	30-meter Level 2	30-meter Level 1	Total	Percent 10-meter	Percent 30-meter Level 2	Percent 30-meter Level 1
AL	36	560	248	844	4.3%	66.4%	29.4%
AR	110	753	15	878	12.5%	85.8%	1.7%
AZ	748	1057	81	1,886	39.7%	56.0%	4.3%
CA	1292	1507	10	2,809	46.0%	53.6%	0.4%
СО	271	1096	429	1,796	15.1%	61.0%	23.9%
СТ	5	10	78	93	5.4%	10.8%	83.9%
DC	0	3	0	3	0.0%	100.0%	0.0%
DE	6	32	0	38	15.8%	84.2%	0.0%
FL	230	734	85	1,049	21.9%	70.0%	8.1%
GA	25	757	169	951	2.6%	79.6%	17.8%
GU	10	0	0	10	100.0%	0.0%	0.0%
HI	153	0	0	153	100.0%	0.0%	0.0%
IA	320	694	21	1,035	30.9%	67.1%	2.0%
ID	928	712	1	1,641	56.6%	43.4%	0.1%
IL	53	860	85	998	5.3%	86.2%	8.5%
IN	73	421	147	641	11.4%	65.7%	22.9%
KS	23	1134	253	1,410	1.6%	80.4%	17.9%
KY	188	167	319	674	27.9%	24.8%	47.3%
LA	70	733	8	811	8.6%	90.4%	1.0%
MA	15	138	45	198	7.6%	69.7%	22.7%
MD	34	136	39	209	16.3%	65.1%	18.7%
ME	32	654	27	713	4.5%	91.7%	3.8%
MI	158	1005	158	1,321	12.0%	76.1%	12.0%
MN	98	1520	65	1,683	5.8%	90.3%	3.9%
MO	118	1115	1	1,234	9.6%	90.4%	0.1%
MS	48	569	154	771	6.2%	73.8%	20.0%
MT	576	1780	549	2,905	19.8%	61.3%	18.9%
NC	143	534	217	894	16.0%	59.7%	24.3%
ND	199	1130	89	1,418	14.0%	79.7%	6.3%
NE	282	1102	32	1,416	19.9%	77.8%	2.3%
NH	65	134	1	200	32.5%	67.0%	0.5%
NJ	150	1	0	151	99.3%	0.7%	0.0%
NM	1467	534	12	2,013	72.9%	26.5%	0.6%
NV	1208	729	65	2,002	60.3%	36.4%	3.2%
NY	971	0	0	971	100.0%	0.0%	0.0%
OH	86	562	128	776	11.1%	72.4%	16.5%
OK	299	876	9	1,184	25.3%	74.0%	0.8%
OR	1830	2	0	1,832	99.9%	0.1%	0.0%
PA	605	71	135	811	74.6%	8.8%	16.6%
PR	0	74	0	74	0.0%	100.0%	0.0%
RI	0	6	20	26	0.0%	23.1%	76.9%
SC	28	340	172	540	5.2%	63.0%	31.9%
SD	423	984	55	1,462	28.9%	67.3%	3.8%
TN	590	36	67	693	85.1%	5.2%	9.7%
TX	47	4128	181	4,356	1.1%	94.8%	4.2%
UT	887	471	188	1,546	57.4%	30.5%	12.2%
VA	160	226	343	729	21.9%	31.0%	47.1%
VI	0	14	0	14	0.0%	100.0%	0.0%
VT	12	118	64	194	6.2%	60.8%	33.0%
WA	1415	0	0	1,415	100.0%	0.0%	0.0%
WI	208	1012	63	1,283	16.2%	78.9%	4.9%
WV	53	158	204	415	12.8%	38.1%	49.2%
WY	640	790	452	1,882	34.0%	42.0%	24.0%

Table 5. NED source data (7.5-minute DEMs), by state.